

## REMARKS

Claims 1-31 are now in the application. Claims 10-23 and 29-31 are directed to the elected invention. Claims 1-9 and 24-28 are drawn to non-elected inventions and may be cancelled by the Examiner upon the allowance of the claims directed to the elected invention. Claims 10 and 19 have been amended for purposes of clarification and to address the objections to these claims. Newly presented claim 29 recites the preferred current density as disclosed on page 5, line 2 of the specification. Claims 30 and 31 recite the preferred copper deposition rates stated on page 4, lines 27 and 28.

Claims 10 and 13-20 were rejected under 35 USC 102(b) as being anticipated by U.S.P. 5,151,168 to Gilton. Gilton does not anticipate the present invention since, among other things, Gilton fails to disclose a current density of about 5 to about 25  $\mu\text{A}/\text{cm}^2$  as recited in the above claims. The broad disclosure of a current density of less than 1 milliamp/ $\text{cm}^2$  is not a disclosure of the claimed range.

The cited references fail to anticipate the present invention. In particular, anticipation requires the disclosure, in a prior art reference, of each and every recitation as set forth in the claims. See *Titanium Metals Corp. v. Banner*, 227 USPQ 773 (Fed. Cir. 1985), *Orthokinetics, Inc. v. Safety Travel Chairs, Inc.*, 1 USPQ2d 1081 (Fed. Cir. 1986), and *Akzo N.V. v. U.S. International Trade Commissioner*, 1 USPQ2d 1241 (Fed. Cir. 1986).

There must be no difference between the claimed invention and reference disclosure for an anticipation rejection under 35 USC 102. See *Scripps Clinic and Research Foundation v. Genentech, Inc.*, 18 USPQ2d 1001 (CAFC 1991) and *Studiengesellschaft Kohle GmbH v. Dart Industries*, 220 USPQ 841 (CAFC 1984).

The law is well settled that claiming of a more specific range within a more generic range and/or claiming species from a broader group of possible compounds avoids a lack of novelty rejection. The test for anticipation is whether the claims read on the prior art disclosure, not on what the references broadly teach.

For example, see *Akzo N.V. v. U.S. International Trade Commissioner* 1 USPQ2d 1241 (Fed. Cir. 1986). In *Akzo*, claims that were drawn to a process for making aramid fibers using a 98% sulfuric acid were not anticipated by a reference using a concentrated sulfuric acid solution but which did not specifically disclose that it was a 98% concentrated sulfuric acid solution. The disclosure of a concentrated sulfuric acid was not deemed an inherent disclosure of the more specific 98% sulfuric acid.

The court further found that no anticipation exists when one would have had to “randomly pick and choose among a number of different polyamides, a plurality of solvents and a range of inherent viscosities” to reach the claimed invention.

Also see *In re Kollman et al.* 201 USPQ 193 (CCPA-1979) wherein the court held that the prior art generic disclosure contains “no suggestion of the required FENAC/diphenyl ether ratio”.

*In Rem-Cru Titanium v. Watson* 112 USPQ 88 (D.D.C.-1956), the prior art showed alloys having broad ranges which include the claimed ranges. However, the prior art did not explicitly disclose the more limited claims ranges or alloys having the characteristics of the claimed alloy, which is analogous to the present case. Accordingly, the court held the claims to be allowable. For a similar factual pattern and same holding, please see *Becket v. Coe* (CA, Dc 1938) 38 USPQ2d and *Tarak v. Watson* (DC-DC 1954) 103 USPQ 78.

Also, see *Minnesota Mining & Manufacturing Co. v. Johnson & Johnson Ortho-Paedics, Inc.* 24 USPQ2d 1321 (Fed. Cir 1992). Here the court held that although the claims may be subsumed in a prior art reference generalized disclosures, this is not literal identity.

Furthermore, the cited references do not inherently disclose the present invention. For instance, see *In re Robertson et al.* 49 USPQ2d 1949 (1999 Fed. Cir.). In this case, Robertson, filed a patent application concerning a paper diaper. The application claimed a paper diaper having (a) two fasteners so that the diaper could be worn on a baby and (b) a third fastener for

rolling up and fixing the used diaper. The Patent Office rejected the invention under 35 USC 102 based on “Principles of Inherency” as the invention is “anticipation” by the prior art.

The prior art (Wilson) relied upon disclosed a diaper, which had two snaps in front and back of the diaper in order to be worn by a baby and which may further have a strip in order to fasten the diaper to baby’s body. Wilson describes that the used diaper can be easily dealt with by rolling up and fixing it with the snaps. Accordingly, the Patent Office considered that the diaper of Wilson inherently has an ability to be rolled up and fixed after use and decided that the claimed diaper is anticipated by the diaper of Wilson. The Federal Circuit; however, held that it is recognized that the constitution of the invention is inherently present in the prior art, only when it is clearly shown that the constitution of the invention is necessarily present in the prior art by external evidence. The invention can not be rejected based on “inherency” because of probability or possibility of the presence of the constitution in the prior art. Also see *Crown Operations International Ltd. v. Solutia*, 24 USPQ2d 1917 (Fed. Cir. 2002).

Moreover, with respect to claim 29, the current density is  $10 \mu\text{A}/\text{cm}^2$  to about  $20 \mu\text{A}/\text{cm}^2$ , which is contrary to the current density required by Gilton. Therefore, if anything, Gilton leads away from the invention as recited in claim 29.

The rejection of claims 11 and 12 under 35 USC 103(a) is being unpatentable over Gilton et al is not deemed tenable for at least those reasons discussed above as to why Gilton et al fail to anticipate claims 10 and 13-20.

Claims 21-23 were rejected under 35 USC 103(a) as being unpatentable over Gilton et al in view of U.S.P. 5,897,692 to Ting et al. The cited references do not render obvious claims 21-23. Ting does not overcome the above discussed deficiencies of Gilton with respect to rendering unpatentable the present invention.

Ting was merely relied upon for a disclosure of using a stabilizer and surfactant in a copper plating bath. Accordingly, claims 21-23 are patentable for at least those reasons as to why claim 10 is patentable.

Claims 10-23 were rejected under the judicially created doctrine of obviousness-type double patenting over claims 1-5, 7, 8, 12 and 14-18 of U.S.P. 6,416,812 to Andricacos et al.

This rejection of claims 10-23 is not deemed tenable. The above claims to Andricacos et al relate to depositing copper from an electroless plating bath. The present claims require electroplating. The claimed electroplating would not be obvious from Andricacos in view of Gilton et al. Nothing in Gilton et al would suggest that electroplating be used in Andricacos et al, contrary to the claims recitations therein and disclosure. In particular, see col. 3, lines 1-15 and 65; col. 4, lines 1-4 and col. 6, line 63 and the abstract.

Furthermore, even if Gilton et al were properly combinable with Andricacos et al, the present invention would still not be suggested since Gilton et al, as discussed above, fail to disclose a current density of about 5 to about 25  $\mu\text{A}/\text{cm}^2$ .

In view of the above, consideration and allowance are, therefore, respectfully solicited.

In the event that the Examiner believes an interview might serve to advance the prosecution of this application in any way, the undersigned attorney is available at the telephone number noted below.

The Commissioner is hereby authorized to charge any fees or credit any overpayment associated with this communication including any extension fees to Deposit Account No. 22-0185.

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